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10/527,755	03/14/2005	Sang-Jin Kim	3449-0454PUS1	8939
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EXAMINER ROJAS, BERNARD				
ART UNIT 2832		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/527,755

Applicant(s)

KIM, SANG-JIN

Examiner

BERNARD ROJAS

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-58 and 61-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-40, 42-48, 50-58 and 61-66 is/are rejected.
- 7) ☒ Claim(s) 41 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 31, 43 and 55 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 65 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what limitation is being claimed by "a distance between the center of the weight and a nearest portion to the center of the weight of the contact portion". For examination purposes, this will be interpreted as "a distance between the center of the weight and a nearest portion to the center of the contact portion".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 43, 46-48 and 50-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroyoshi et al. [US 5,682,132].

Claim 43, Hiroyoshi et al. discloses a vibration device [figure 1] comprising: a casing body including an upper surface [410] a lower surface [420] and a side surface [210] extending from the upper surface to the lower surface; a weight [120/110] including at least one magnet [110] disposed in the casing body; at least one elastic unit [310] configured to support the weight elastically and contacted with the upper surface of the casing body [via member 210]; a magnetic force generating unit [220] configured to generate a magnetic force to vibrate the weight in the casing body, wherein a distance between a side surface of the weight [120,110] and a side surface [210] of the casing body is smaller than a distance between an upper surface of the weight [110,120] and the upper surface of the casing body [410].

Claim 46, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit includes a strip of a closed-curve shape and a plurality of support legs extended from the strip, the strip being connected to the weight and the plurality of support legs being connected to the casing body such that the weight is suspended in the casing body [figures 3, 8 and 10-12].

Claim 47, Hiroyoshi et al. discloses the vibration device according to claim 43, further comprising a fixing member [210] attached to the casing body and configured to support the at least one elastic unit [figure 1].

Claim 48, Hiroyoshi et al. discloses the vibration device according to claim 47, wherein the fixing member is contacted with the upper surface, the lower surface and the side surface of the casing body [figure 1].

Claim 50, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the strip has a polygonal or circular shape [figures 3, 8 and 10-12].

Claim 51, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit is a coil spring of a circular or polygonal conical shape [figure 9].

Claim 52, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the magnet is formed on only one surface of the weight opposite to the magnetic force generating unit [figure 1].

Claim 53, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the magnetic force generating unit is a coil [220].

Claim 54, Hiroyoshi et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit includes at least two elastic units [figure 1], and wherein elastic unit insert grooves [groove between 120 and 130] are formed on the upper and lower surfaces of the weight so that the at least two elastic units are inserted and fixed therein respectively.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 31-34, 38, 39, 42-45, 47, 48, 52, 53, 55-58 and 61-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda et al. [US 6,777,895] (figure 8a).

Claims 31 and 33, Shimoda et al. discloses a vibration device [figure 8a] comprising: upper [7] and lower [11] cases combined with each other to form a case; a magnetic force generating unit [2] provided on at least one surface of the upper and lower cases [figure 8a]; at least one magnet [5] formed to be opposite to the magnetic force generating unit; a weight [4] combined with the at least one magnet; and at least one elastic unit [6] configured to support the weight elastically, wherein the upper case includes an upper surface and a side surface extended from the upper surface to the lower case [figure 8a], and wherein the at least one elastic unit is directly contacted and support with the case [figure 8a].

Shimoda et al. fails to teach attaching the elastic unit directly to the upper surface of the casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 32, Shimoda et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit is directly contacted with the lower surface of the casing body [figure 8a].

Claim 34, Shimoda et al. discloses the vibration device according to claim 31, further comprising a fixing member [3] configured to fix ends of the at least one elastic unit [figure 8a].

Claim 38, Shimoda et al. discloses the vibration device according to claim 31, wherein the magnet is formed on only one surface [the inner periphery] of the weight opposite to the magnetic force generating unit [figure 8a].

Claim 39, Shimoda et al. discloses the vibration device according to claim 31, wherein the magnetic force generating unit is a coil [2].

Claim 42, Shimoda et al. discloses the claimed vibration device with the exception of the at least one magnet includes at least two magnets are formed on both surfaces of the weight. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use two smaller magnets instead of one large

magnet, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Claims 43 and 45, Shimoda et al. discloses a vibration device [figure 8a] comprising: a casing body including an upper surface [7] a lower surface [11] and a side surface [surface between 7 and 11, figure 8a] extending from the upper surface to the lower surface; a weight [4/5] including at least one magnet [5] disposed in the casing body; at least one elastic unit [6] configured to support the weight elastically, and contacted with the casing body; a magnetic force generating unit [2] configured to generate a magnetic force to vibrate the weight in the casing body, wherein a distance between a side surface of the weight [4/5] and a side surface of the casing body is smaller than a distance between an upper surface of the weight [4/5] and the upper surface of the casing body [7, figure 8a].

Shimoda et al. fails to teach attaching the elastic unit to the upper surface of the casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 44, Shimoda et al. discloses the vibration device according to claim 43, wherein the at least one elastic unit is directly contacted with the lower surface of the casing body [figure 8a].

Claim 47, Shimoda et al. discloses the vibration device according to claim 43, further comprising a fixing member [3] attached to the casing body and configured to support the at least one elastic unit [figure 8a].

Claim 48, Shimoda et al. discloses the vibration device according to claim 47, wherein the fixing member is contacted with the upper surface, the lower surface and the side surface of the casing body [figure 8a].

Claim 52, Shimoda et al. discloses the vibration device according to claim 43, wherein the magnet is formed on only one surface of the weight opposite to the magnetic force generating unit [figure 8a].

Claim 53, Shimoda et al. discloses the vibration device according to claim 43, wherein the magnetic force generating unit is a coil [2].

Claim 55, Shimoda et al. discloses a vibration device [figure 8a] comprising: a casing body including an upper surface [7], a lower surface [11] and a side surface [surface between 7 and 11, figure 8a]; a weight [4/5] including at least one magnet [5] disposed in the casing body; an elastic unit [6] configured to support the weight elastically and directly contacted with the casing body [at 11] and the weight at a direct fixing portion [at 4] of the elastic unit; and a magnetic force generating unit [2] configured to generate a magnetic force to vibrate the weight in the casing body wherein a first surface of the elastic unit facing the upper surface of the casing body is

directly contacted with the lower surface of the weight and a second surface of the elastic unit facing the lower surface of the casing body is directly contacted with the lower surface of the casing body [figure 8a].

Shimoda et al. fails to teach that the elastic unit is directly connected to the upper portion of the weight and the upper casing body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case which would result in a first surface of the elastic unit facing the lower surface of the casing body being directly contacted with the upper surface of the weight and a second surface of the elastic unit facing the upper surface of the casing body being directly contacted with the upper surface of the casing body, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 56, Shimoda et al. discloses the claimed invention with the exception of the magnetic force generating unit being formed on the lower surface of the casing body [figure 8a].

Claim 57, Hiroyoshi et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit is contacted and supported with the lower surface of the casing body [figure 8a].

Claim 58, Shimoda et al. discloses the vibration device according to claim 55, wherein the magnet and the contact portion of the elastic unit and the weight are formed on a same horizontal plane [figure 8a].

Claims 61 and 63, Shimoda et al. discloses a vibration device [figure 8a] comprising: upper [7] and lower [11] cases combined with each other to form a case; the upper case having a uniform thickness [figure 8a], a magnetic force generating unit [2] provided on a surface of the lower case; a magnet [5] disposed to be opposite to the magnetic force generating unit; a weight [4] combined with the magnet; and an elastic unit [6] configured to support the weight elastically, wherein the elastic unit is directly contacted and supported with the case.

Shimoda et al. fails to teach attaching the elastic unit directly to the upper surface of the casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 62, Shimoda et al. discloses the vibration device according to claim 61, wherein the upper case includes an upper surface and a side surface extended from the upper surface to the lower case [figure 8a].

Claim 64, Shimoda et al. discloses the vibration device according to claim 62, wherein the side surface has a uniform thickness [figure 8a].

Claim 65, as best understood, Shimoda et al. discloses a vibration device [figure 8a] comprising: a casing body [7, 11] including an upper surface, a lower surface and a side surface [figure 8a] a weight [4] including a magnet [5] disposed in the casing body;

an elastic unit [6] configured to support the weight elastically and contacted with a contact portion on the casing body; and a magnetic force generating unit [2] configured to generate a magnetic force to vibrate the weight in the casing body, wherein a distance between the center of the weight and the side surface of the weight is larger than a distance between the center of the weight and a nearest portion to the center of the contact portion [figure 8a].

Shimoda et al. fails to teach attaching the elastic unit directly to the upper surface of the casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 66, Shimoda et al. discloses a vibration device [figure 8a] comprising: a casing body [7, 11] including an upper case and lower case; a magnetic force generating unit [2] provided on a surface of the lower case [figure 8a]; a magnet [5] disposed to be opposite to the magnetic force generating unit; a weight [4] combined with the magnet; and an elastic unit [6] configured to support the weight elastically and contacted with a contact portion of the case, wherein a portion of the upper case, a portion of the contact portion, a portion of the weight and a portion of the lower case are arranged on a same vertical plane [figure 8a].

Shimoda et al. fails to teach attaching the elastic unit directly to the upper surface of the casing.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the attachment point on the elastic unit from the lower surface of the case to the upper surface of the case, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

3. Claims 31, 35-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda et al. [US 6,777,895] (figure 6a) in view of Hiroyoshi et al. [US 5,682,132].

Claim 31, Shimoda et al. discloses a vibration device [figure 6a] comprising: upper [7] and lower [11] cases combined with each other to form a case; a magnetic force generating unit [2] provided on at least one surface of the upper and lower cases [figure 8a]; at least one magnet [5] formed to be opposite to the magnetic force generating unit; a weight [4] combined with the at least one magnet; and at least one elastic unit [6] configured to support the weight elastically, wherein the upper case includes an upper surface and a side surface extended from the upper surface to the lower case [figure 6a], and wherein the at least one elastic unit is directly contacted and support with the case [figure 6a].

Claim 35, Shimoda et al. discloses the claimed invention with the exception of the shape of the elastic unit.

Hiroyoshi et al. teaches a vibration device [figure 1] with at least one elastic unit [310] configured to support a weight [110,120] elastically wherein the at least one elastic unit includes a strip of a closed-curve shape and a plurality of support legs extended from the strip, and wherein the support legs form a downwardly turning curve in an axial direction of the strip [figures 3, 8 and 10-12].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the elastic unit shape of Hiroyoshi et al. in the vibration unit of Shimoda et al. in order to adjust the actuation properties of the weight.

Claim 36, Shimoda et al. discloses the claimed invention with the exception of the shape of the elastic unit.

Hiroyoshi et al. teaches a vibration device [figure 1] with at least one elastic unit [310] configured to support a weight [110,120] elastically wherein the strip has a polygonal or circular shape [figures 3, 8 and 10-12].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the elastic unit shape of Hiroyoshi et al. in the vibration unit of Shimoda et al. in order to adjust the actuation properties of the weight.

Claim 37, Shimoda et al. discloses the claimed invention with the exception of the shape of the elastic unit.

Hiroyoshi et al. teaches a vibration device [figure 1] with at least one elastic unit [310] configured to support a weight [110,120] elastically wherein the at least one elastic unit is a coil spring of a circular or polygonal conical shape [figure 9].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the elastic unit shape of Hiroyoshi et al. in the vibration unit of Shimoda et al. in order to adjust the actuation properties of the weight.

Claim 40, Shimoda et al. discloses the vibration device according to claim 31, wherein the at least one elastic unit includes two elastic units [figure 6a] with the exception of how the elastic units are attached.

Hiroyoshi et al. teaches a vibration device [figure 1] with an elastic unit [310] attached to a weight [110, 120] via insert grooves [groove between 120 and 130] are formed on the upper and lower surfaces of the weight so that the at least two elastic units are inserted and fixed therein respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the elastic unit of Shimoda et al. to the weight using the system shown by Hiroyoshi et al. in order to provide a secure attachment means between the elastic unit and the weight.

Allowable Subject Matter

Claims 41 and 49 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BERNARD ROJAS whose telephone number is (571)272-1998. The examiner can normally be reached on M and W-F, 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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